

**ABSTRACT**

The present disclosure relates to a data storage device. The data storage device comprises a closed interior space containing a noble gas, a plurality of electron emitters having emission surfaces exposed within the interior space, the electron  
5 emitters adapted to emit electron beams, and a storage medium contained within the interior space in proximity to the electron emitters, the storage medium having a plurality of storage areas that are capable of at least two distinct states that represent data, the state of the storage areas being changeable in response to bombardment by electron beams emitted by the electron emitters.